CLAIMS

1. The use of nucleic acids mediating RNA interference specific for mRNA of a protein of the hepatoma-derived growth factor family, for the modulation of the nuclear transport of lentiviral integrase.

2. The use of nucleic acids mediating RNA interference specific for mRNA of a protein of the hepatoma-derived growth factor family, for the manufacture of a medicament for the prevention and/or treatment of a viral infection.

3. The use of a protein of the hepatoma-derived growth factor family, a homologue, a derivative or fragment thereof to increase the solubility of lentiviral integrase during crystallisation purposes, antiviral testing and viral research.

4. The use of an isolated and purified polynucleotide encoding the Inip76 protein or an intermediate or a fragment of said protein, an allelic variant, a homologue, a portion or a mutation thereof, for the manufacture of an lentiviral-related diagnostic tool.

5. The use of an isolated and purified polynucleotide encoding the Inip76 protein or an intermediate or a fragment of said protein, an allelic variant, a homologue, a portion or a mutation thereof, for the screening of molecules for their anti-lentiviral activity.

6. The use of an isolated and purified polynucleotide encoding the Inip76 protein or an intermediate or a fragment of said protein, an allelic variant, a homologue, a portion or a mutation thereof, for the manufacture of a medicament for the prevention and/or treatment of a viral infection (more particularly a lentiviral infection, more particularly HIV).

7. A polynucleotide encoding the Inip76 protein or an intermediate or a fragment of said protein, an allelic variant, a homologue, a portion or a mutation thereof, further comprising a polynucleotide which codes for a least a portion of the HIV integrase.

8. The polynucelotide of claim 7, the combination of both polynucleotides being arranged in such a way that a fusion protein results after expression.

9. The use of the Inip76 protein, a homologue, a variant, a mutated form or a fragment thereof, for the manufacture of a medicament for the prevention and/or treatment of a viral infection (more particularly a lentiviral infection, more particularly HIV).

10. The use of the Inip76 protein, a homologue, a variant, a mutated form or a fragment thereof, for the manufacture of an HIV-related diagnostic tool.

11. The use of the Inip76 protein, a homologue, a variant, a mutated form or a fragment thereof, for the screening of molecules for their anti-lentiviral activity.

12. The use of the Inip76 protein, a homologue, a variant, a mutated form or a fragment thereof for the crystallisation of a lentiviral-integrase.

13. The use of a molecule which comprises a region specifically interacting with a protein of the hepatoma-derived growth factor family or nucleic acids encoding said protein of the hepatoma-derived growth factor family, for the manufacture of a medicament for the prevention and/or treatment of a viral infection.

14. The use of a molecule which comprises a region specifically interacting with a protein of the hepatoma-derived growth factor family or nucleic acids encoding said protein of the hepatoma-derived growth factor family, for the modulation of the interaction of Inip76 with lentiviral integrase in antiviral research.

15. The use of a molecule as in claim 13 and 14, wherein the protein of the hepatoma-derived growth factor family is Inip76.

16. The use of a molecule as in claim 13 to 15, wherein said molecule is selected from the group comprising an antibody or any fragment thereof, a peptide, a small molecule, an antisense nucleic acid, an antigene compound, a ribozyme, nucleic acids mediating RNA interference and a variant polypeptide.

17. The use of a molecule as in claim 13 to 15, wherein said molecule is an antibody.

18. The use of a molecule as in claim 13 to 15, wherein said molecule is a nucleic acid mediating RNA interference specific for mRNA of Inip76.

19. The use of a molecule as in claim 13 and 15, wherein said molecule is a ribozyme.

20. The use of a construct mediating gene therapy specific for modifying the expression of Inip76, for the manufacture of a medicament for the prevention and/or treatment of a viral infection.

21. A composition comprising:

a) a molecule which comprises a region specifically interacting with a protein of the hepatoma-derived growth factor family or nucleic acids encoding said protein of the hepatoma-derived growth factor family, and

b) one or more compounds effective in the treatment or prevention of viral infections.

22. A method to identify molecules which comprise a region specifically binding to a protein of the hepatoma-derived growth factor family or nucleic acids encoding said protein of the hepatoma-derived growth factor family, comprising the steps of exposing said protein or nucleic acids encoding said protein to at least one molecule whose ability to suppress said protein of interacting with a retroviral integrase protein is sought to be determined, followed by the determination of the binding or hybridisation of said molecule(s) to said protein or to binding places of said protein on said integrase or to nucleic acids encoding said protein and monitoring the prevention or suppressing of retroviral replication or integration by the usage of at least one of said molecules.

23. A method to increase the nuclear import of lentiviral integrase, comprising the use of a protein of the hepatoma-derived growth factor family or a analog, derivative or fragment thereof.

24. A protein complex comprising a retroviral integrase and Inip76.

25. A protein complex as in claim 24, wherein said integrase and Inip are recombinantly produced.

26. The use of Inip76 as a cellular cofactor of lentiviral integration.

27. The HIV-integrase, characterised in that said integrase is in its tetrameric form.

28. The use of the HIV integrase as in claim 27 for screening purposes, crystallography and diagnostic purposes.

29. The use of a protein of the hepatoma-derived growth factor family, a homologue, a derivative or fragment thereof for the crystallisation of lentiviral integrase.